

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Canceled)
2. (Previously Presented): The method of Claim 29, wherein the needle is selected from the group consisting of microneedles, catheter needles, and injection needles.
3. (Previously Presented): The method of Claim 29, wherein a single needle is inserted.
4. (Previously Presented): The method of Claim 29, wherein multiple needles are inserted.
5. – 9. (Canceled)
10. (Previously Presented): The method of Claim 29, wherein the needle is about 300 μm to 2 mm long.
11. (Previously Presented): The method of Claim 29, wherein the needle is about 500 μm to 1 mm long.
12. (Previously Presented): The method of Claim 29, wherein the outlet is at a depth of about 250 μm to 2 mm when the needle is inserted.
13. (Previously Presented): The method of Claim 29, wherein the outlet is at a depth of about 750 μm to 1.5 mm when the needle is inserted.
14. (Previously Presented): The method of Claim 29, wherein the outlet has an exposed height of about 0 to 1 mm.
15. (Previously Presented): The method of Claim 29, wherein the outlet has an exposed height of about 0 to 300 μm .
16. (Previously Presented): The method of Claim 29, wherein the delivery rate or volume is controlled by spacing of multiple needles, needle diameter or number of needles.

17. (Withdrawn): A needle for intradermal delivery of a substance into skin comprising means for limiting penetration of the needle into the skin and an outlet positioned such that when the needle is inserted into the skin to a depth determined by the penetration limiting means, leakage of the substance to the surface of the skin is substantially prevented.

18. (Withdrawn): The needle of Claim 17 wherein the outlet is at a depth of about 500 μm to 2 mm when the needle is inserted into the skin.

19. (Withdrawn): The needle of Claim 18 wherein the outlet is at a depth of about 750 μm to 1.5 mm when the needle is inserted into the skin.

20. (Withdrawn): The needle of Claim 17 which is about 300 μm to 2 mm long.

21. (Withdrawn): The needle of Claim 20 which is about 500 μm to 1 mm long.

22. (Withdrawn): The needle of Claim 17 which is contained in a device comprising a reservoir in fluid communication with the needle.

23. (Withdrawn): The needle of Claim 22 which is contained in a device further comprising pressure-generating means for delivering the substance through the needle.

24. (Withdrawn): The needle of Claim 23 wherein the pressure-generating means provides variable control of substance delivery rate.

25. – 28. (Canceled)

29. (Currently Amended): A method for administration of insulin a-drug to a human subject, comprising delivering the insulin drug through the lumen of a hollow needle into an intradermal compartment of the human subject's skin, which method comprises

(a) inserting the needle into the subject's skin so that the needle penetrates the intradermal compartment, and the needle's outlet depth and exposed height of the outlet are located within the intradermal compartment, wherein the outlet has an exposed height of about 0 to 1 mm; and

(b) delivering the insulin drug through the lumen of the needle with the application of pressure in an amount effective to control the rate of delivery of the insulin drug,

so that the insulin drug is delivered through the lumen of the needle into the intradermal compartment and distributed systemically exhibiting a pharmacokinetic profile similar to subcutaneous delivery of the insulin drug, but with a higher maximum plasma concentration and a higher bioavailability.

30. – 31. (Canceled)

32. (Withdrawn): The method of claim 29, wherein the drug is used for the treatment of toxicity.

33. (Withdrawn): The method of claim 32, wherein the drug is an antitoxin.

34. (Withdrawn): The method of claim 29, wherein the drug is used to control pain.

35. (Withdrawn): The method of claim 34, wherein the drug is selected from a group consisting of an opioid, an analgesic, or an anesthetic.

36. (Withdrawn): The method of claim 29, wherein the drug is used to control thrombosis.

37. (Withdrawn): The method of claim 36, wherein the drug is selected from a group consisting of heparin, coumadin, or warfarin.

38. (Withdrawn): The method of claim 29, wherein the drug is used to control or eliminate infection.

39. (Withdrawn): The method of claim 38, wherein the drug is an antibiotic.